Interview Transcription:

Robert Bremner PhD '20, interviewed by Linda Esquivel (Student Services Officer) on June 2020

[Bremner]

So my name's Rob Bremner PhD class of 2020 at Stanford. My major is in Management, Science and Engineering, and I focus on Organizations and Strategy.

[Interviewer]

Can you tell me a bit about your background? Where did you grow up? Where did you study before Stanford?

[Bremner]

I grew up in a small town in Northern Ontario, it's called North Bay about four hours North of Toronto. As a, sort of a circuitous path to get where I am today, I started studying mechanical engineering really briefly before switching into economics and then switching into business. So I went to school in Canada, eventually ended up at the Richard Ivey School of Business there. I was super interested in what I was studying there, basically focusing on, strategy and finance. And immediately after I graduated, I ended up taking a job lecturing at the same school, teaching a second year class on introduction that's basically an introduction to business.

On the side while I was doing that, I started doing research with some faculty at the school and that led me to eventually apply to Stanford. And so here I am.

[Interviewer]

How did you become interested in engineering?

[Bremner]

I think there are two sides of this. One, I think part of it is just, I love building things. I always have. There's something super satisfying about that actually seeing, something that you've invented and envisioned actually, in the material world. Ever since I was a kid, I spent my summers building one thing or another. There's also something intrinsically satisfying to me about process efficiency. So I love the satisfaction that I get when I can discover something really clever, whether when I'm trying to solve a problem or also just looking at solutions that other people have created, just the ingenuity that you can see, just learning about what they had done.

There's just something intrinsically satisfying to me about engineering. So that's one side of it and I think the other side of it is the importance of engineering to even to our society. I think it really matters if you think about all these grand challenges that we face globally, whether it's climate change, things like deforestation or even things like inequality, human rights, engineering in many ways can play a

significant role either directly or indirectly in solving some of these challenges. So, yeah, I think it's personally interesting to me, but I also think it's something that's very valuable to society, so it's satisfying and it feels good to get involved and to study it and focus and why I study engineering. It's sorta like the meta of engineering, like how can we become better engineers?

So that's why that matters to me as I'm not focused on just designing a particular, I study more on how can we go about actually designing things more efficiently and in a better way.

Interviewer:

Can you tell us a bit about your research? How did you get interested in it?

[Bremner]

My research focuses on how you design organizations and how you design processes within organizations to improve the odds of successful innovation. So how can you increase the chances that you're going to create a product that essentially the market will value? I became interested in this topic in particularly, or particularly because as I was saying earlier, I kind of spent my childhood building things and that continued on into college. Like I've, I've tried my hand at developing video games smartphone apps digital music, and even, even into visual arts. So I've been very involved in building things in the creative process and I never really saw myself as great at it.

I didn't think it was a natural anyways. I was okay but I had to work at it. And so I think a major reason why I'm fascinated in the engineering processes and improving that process is, is essentially for that reason. Like, I want it to become better, personally. So I've always wondered how I could do that. So that led me to ask these sorts of questions. What can I do to make the process easier for myself and for other people? So there's a couple of reasons that a couple of ways I get at answering this question in my own research. The first way is by looking at organizations themselves. And I specifically, I asked, how can you design an organization? Whether that's the incentive structures or the selection process, what I mean by that is like whether or not you interview people and actually hire them or, or just kind of let them join organically.

What are some things that you can do to make the innovation process or the engineering process more efficient? So for that particular question, I look at open source development essentially. I studied what sorts of problems or productsthat development process is best suited to. What I find in that particular study is, if you can think about any sort of company or whether it's a startup or a larger organization, sometimes if the problem you're trying to solve is very, very clear other times, and I'm going to use video games as an example sometimes, because I work in the gaming industry now oftentimes in gaming, it's not really clear what problem you're trying to solve. You're trying to create something that's fun for people, but it's not really clear how you're going to do that.

And so what I found is that opensource development getting sort of this community of people together, where they're all kind of working on their own thing in video games, that's developing often sort of these game mods that works much better when there's a lot of ambiguity and you don't really know what, what problem you're trying to solve, but when you do know what problem you're trying to solve much more rigid hierarchical structure works best. So that's, that's one of my papers and that's one of

my research questions. Another way I look at the sort of broader question of how you improve the innovation process is by looking at specifically product development, again, the video game industry, but this time I just focused on the process, less, less of what organizations and I look at whether or not you interact with customers and then how you interact with them.

So sort of a big question here in the Valley has always been whether or not you should really listen and cater to your customers or whether you should take more of a Steve jobs approach and just, you know, know exactly what you want and just design it the way that you think it should be designed. So I look at that in the video game industry there's a lot of data on the PC development projects that have been launched in what's called it like an alpha stage of development. So really early stage, not all the features that they are, the graphics aren't necessarily complete. But they launched these games and these early builds and they try and get feedback from, from this, these, these communities of gamers and they iterate and, and try, and I'm trying to improve the games from there. So I look at whether or not that process is actually useful for the developers at improving their financial performance down the road.

And what I find is that it's a great thing to listen to your customers. If you pay attention to your biggest critics rather than your biggest fans. So if you listen to your fans, they already liked your game, so if you incorporate their feedback, your product's not going to improve for those people who don't like it. You're just going to kind of create a niche product and you're not going to expand your market and sell more copies. But if you listen to your critics, that's how you really expand your market. So yeah, I look at 3000 video game development projects and show that statistically in the, in the paper, I actually have brought a lot of the insights from my research into my own work, because even creating a writing a paper, is in some ways, you're still building something.

And so like at what point should I ask for feedback in this process and who should I be listening to? How many people should I be listening to? So I, I think I've done a pretty good job at following my own advice. And I think it's made it actually easier as I've matured through the PhD program to write papers faster and more efficiently, which has been cool. It's actually been cool seeing that come to fruition. How do you imagine your research interests? I think my choice to work in industry is going to shape what I, what I focus on. So in some ways my research would probably focus on questions that need to be answered here and now so how can we make an X or Y decision to make sure that, you know we're making or creating the most value for our customers? I would like to still focus on sort of the meta questions that I have been focusing on that would be ideal, but I'm not sure I'll be able to do that. So we'll, we'll see, but I think more importantly I really value making an impact to management practice. So I plan to focus my energy more on that aspect and hopefully the questions that I focused on will bring me closer to that goal over time.

[Interviewer]

What are your career plans for after Stanford and how did you decide on them?

[Bremner]

Yeah, so I currently am working in a corporate strategy team and the gaming industry. I think longterm, I see an opportunity for myself at the intersection of data science and strategy, because strategy has traditionally been a discipline that's been dominated a traditional focus on qualitative analysis. Typically

that would be from students who have majored exclusively in business. They may have gone to business school, probably did an MBA.I think the skillset that I bring is really complimentary to that because the skills that I picked up at Management Science and Engineering are much more quantitative very focused on data. And particularly me being in the entertainment industry, whether it's gonna be video games or movies or something else, there's a ton of data. There's a lot of data on competitors. There's a lot of data on our own, you know, on your own products. And so I really want to marry these two fields, data science and strategy and create value that way.

[Interviewer]

What most excites you about your future?

[Bremner]

I think there wasn't one specific thing, but now that I've completed my PhD I'm just excited by the number of opportunities that I'm going to have to make and impact in the world. I think with the skills that I've developed here at Stanford with the people I've met, the network that I've developed and also just the perspective I've gained from working with probably the most awesome, well, those brilliant people that I've ever met, but also probably the most humble and down to earth people that I've ever I've ever met. I just feel excited to take the next step and, and move on to the opportunities that all of that has provided me.

[Interviewer]:

What advice do you have for future students and how can they make the best use of their time in MS&E and at Stanford?

[Bremner]

That's a really good question. If I did another PhD, I probably wouldn't do it perfectly. It's not, it's probably something you'd have to do multiple times to get, right, but I would say, give yourself time to explore different research before committing to a particular dissertation topic, because once you commit you can change ultimately, but that will then mean that takes time. But also once you commit, you're going to be focused on that particular topic for a very long time. And it's, ideal if you are passionate about it and, uare motivated intrinsically to see it through and to make sure that it's, you know, something that you're proud of,uat the same time, it's great that if you know your initial ideas and your initial area of interest works out, but I would also be prepared mentally to hit several dead ends and have to change course or time. That's just, that happened to me several times. Uthe first couple of times it was pretty difficult, but it's just something that I think happens to most, all the luckiest of students. So take what you can from your experiences and your failures, and just move on to the next idea quickly when gracefully,

I think that's great advice. How can they make the best use of their time in MS&E and Stanford or just in general?

I personally made the mistake early on of sticking within my group at Stanford, but Stanford is so diverse and there are so many interesting people across departments, whether that's within MS&E or outside of MS&E, you know, in other engineering schools at the business school. So I would do what you can to meet people and you know, share your interests with them and learn about what they're interested in and collaborate. And yeah, it's a wonderful community and just make the most of it.

[Interviewer]

What will you miss most about Stanford?

[Bremner]

I will definitely miss the people here at Stanford, they are just absolutely amazing. They're totally brilliant. They're extremely creative. They're always willing to help if you come to them with issues, even if they've never met you before you can email professors, the experts in their respective areas, and they will help you with whatever problems that you're, that you're focused on. They'll refer you to somebody who can help you. I'll miss the people I've met so many great people. I've met so many good friends here. Yeah, I'll miss them a lot.